

# Improving Environmental Impact Assessment (EIA): EIA review

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**ERM Japan Ltd.**

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# Outline

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- 1. JBIC checklist  
(Japan Bank For International Cooperation)
  
- 2. IFC guideline  
(International Finance Corporation)
  
- 3. Points of Review

# JBIC Checklist

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- JBIC is a Japanese public financial institution and export credit agency
- JBIC has developed an Environmental Checklist (JBIC checklist) for their review of projects
- Checklist for total 27 different sectors (Mining, Oil and Gas, Power, Road, etc)
- Checklist items are selected based on a nature of sector

# JBIC Checklist

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- Each sector checklist include the following categories and items related to environment.

Category	Item
1. Permits and approvals, explanations	EIA and environmental permits
	Explanations to the Public
2. Anti-pollution measures	Air quality
	Water quality
	Waste
	Soil contamination
	Noise and vibration
	Subsidence
	Odor
	Sediment

# JBIC Checklist

Category	Item
3. Natural environment	Protected areas
	Ecosystem and biota
	Hydrology
	Topography and geology
	Management of abandoned sites
4. Social environment	Resettlement
	Living and livelihood
	Heritage
	Landscape
	Ethnic minorities and indigenous peoples
	Working conditions (including occupational safety)

# JBIC Checklist

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Category	Item
5. Other	Impact during construction
	Accident prevention measures
	Monitoring

# JBIC Checklist for Hydro Power

## Environmental Checklist: 13. HydroPower, Dams and Reservoirs (1)

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
1 Permits and Explanation	(1) EIA and Environmental Permits	<ul style="list-style-type: none"> <li>① Have EIA reports been officially completed?</li> <li>② Have EIA reports been approved by authorities of the host country's government?</li> <li>③ Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied?</li> <li>④ In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?</li> </ul>	
	(2) Explanation to the Public	<ul style="list-style-type: none"> <li>① Are contents of the project and the potential impacts adequately explained to the public based on appropriate procedures, including information disclosure? Is understanding obtained from the public?</li> <li>② Are proper responses made to comments from the public and regulatory authorities?</li> </ul>	
2 Mitigation Measures	(1) Water Quality	<ul style="list-style-type: none"> <li>① Do water quality of dam pond/reservoir comply with the country's ambient water quality standards? Is there a possibility that proliferation of phytoplankton and zooplankton will occur?</li> <li>② Does the quality of water discharged from the dam pond/reservoir comply with the country's ambient water quality standards?</li> <li>③ Are adequate measures, such as clearance of woody vegetation from the inundation zone prior to flooding planned to prevent water quality degradation in the dam pond/reservoir?</li> <li>④ Is there a possibility that reduced the river flow downstream will cause water quality degradation resulting in areas that do not comply with the country's ambient water quality standards?</li> <li>⑤ Is the discharge of water from the lower portion of the dam pond/reservoir (the water temperature of the lower portion is generally lower than the water temperature of the upper portion) planned by considering the impacts to downstream areas?</li> </ul>	
	(2) Wastes	<ul style="list-style-type: none"> <li>① Are earth and sand generated by excavation properly treated and disposed of in accordance with the country's standards?</li> </ul>	
3 Natural Environment	(1) Protected Areas	<ul style="list-style-type: none"> <li>① Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?</li> </ul>	

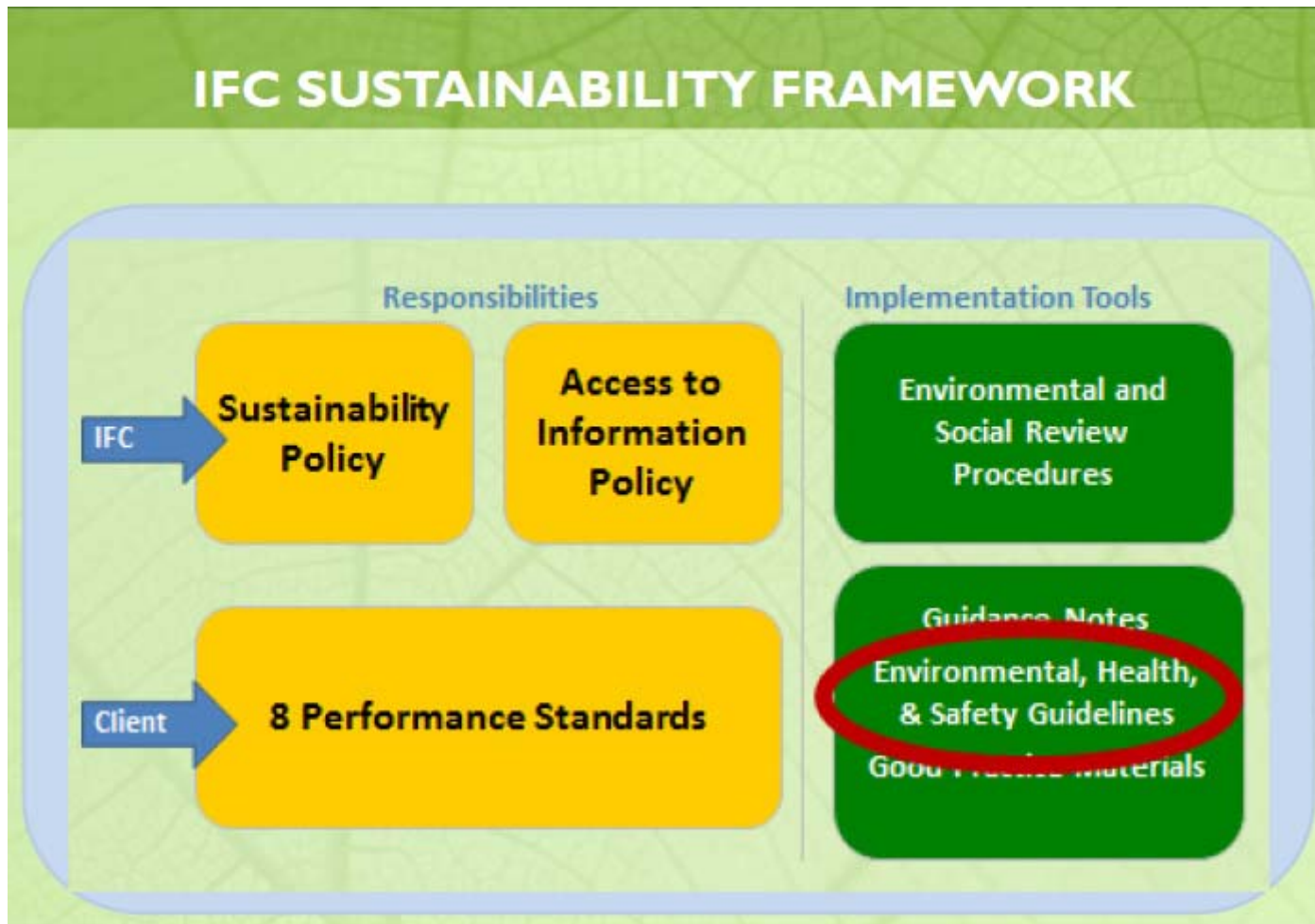
# IFC Guideline

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- IFC is a member of world bank and has developed several safeguard manuals including;
  - ✓ IFC Performance Standard
  - ✓ IFC Environmental, Health and Safety (EHS) guideline



# IFC Guideline

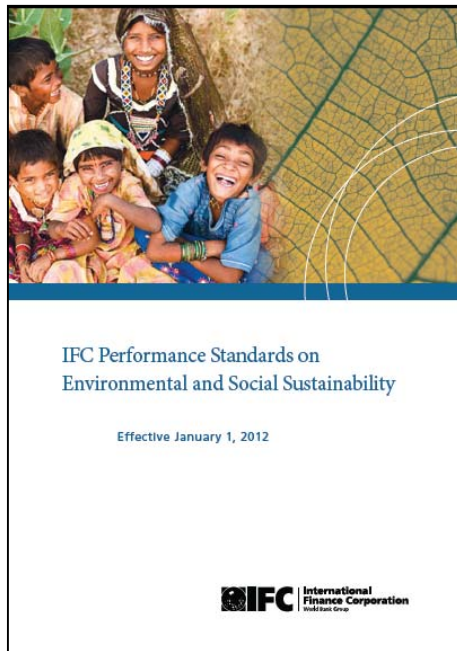


Source: [firstforsustainability.org](http://firstforsustainability.org)

# IFC Performance Standard

## IFC Performance Standard

: Define clients' responsibilities for managing environmental and social risks.



### PS 1: Assessment and Management of Environmental and Social Risks and Impacts

PS2

Labour and Working Conditions

PS3

Resource Efficiency and Pollution Prevention

PS4

Community Health, Safety and Security

PS5

Land Acquisition and Involuntary Resettlement

PS6

Biodiversity Conservation and Sustainable Management of Living Natural Resources

PS7

Indigenous Peoples

PS8

Cultural Heritage

# IFC PS Key Themes

Performance Standard	Key Themes
PS1 - Assessment and Management of Environmental and Social Risks and Impacts	<ul style="list-style-type: none"> <li>• Private sector responsibility to respect human rights</li> <li>• Applicability beyond project finance</li> <li>• Stakeholder engagement beyond affected communities</li> <li>• Policy reflecting PS</li> <li>• Participatory monitoring during implementation</li> <li>• Periodic performance reviews by senior management</li> </ul>
PS2 - Labor and Working Conditions	<ul style="list-style-type: none"> <li>• Terms and conditions for migrant workers comparable to non-migrant</li> <li>• <b>Workers' accommodations</b></li> <li>• Monitoring of working conditions for workers under 18</li> <li>• Policies and procedures to manage and monitor third parties</li> <li>• Alternatives analysis in case of retrenchment</li> <li>• Primary supply chain (ongoing monitoring and 'Safety')</li> </ul>
PS3 - Resource Efficiency and Pollution Prevention	<ul style="list-style-type: none"> <li>• Resource efficiency concept for; energy, water, and core material inputs</li> <li>• Reduces greenhouse gas emissions thresholds (25,000 tCO<sub>2</sub>eq)</li> <li>• Determination of accountability with regards to historical pollution</li> <li>• Introduces 'duty of care' for hazardous waste disposal</li> </ul>
PS4 - Community Health, Safety, and Security	<ul style="list-style-type: none"> <li>• <b>Considers risk to communities through an ecosystem services approach</b></li> </ul>

# IFC PS Key Themes

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Performance Standard	Key Themes
PS5 - Land Acquisition and Involuntary Resettlement	<ul style="list-style-type: none"> <li>• Extends the scope of application to restrictions on land use</li> <li>• Strengthens requirements regarding consultations</li> <li>• Requirements for a completion audit under certain circumstances</li> </ul>
PS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources	<ul style="list-style-type: none"> <li>• Clarifies definitions and requirements for various types of habitats</li> <li>• Stronger and more specific requirements for:               <ul style="list-style-type: none"> <li>- Biodiversity offsets</li> <li>- Plantations and natural forests</li> <li>- Management of renewable natural resource</li> </ul> </li> <li>• Strengthens Supply Chain Scope</li> </ul>
PS7 - Indigenous Peoples	<ul style="list-style-type: none"> <li>• Indigenous Peoples' specific circumstances in developing mitigation measures and compensation</li> <li>• Requirement for land acquisition due-diligence in lands subject to traditional ownership or under customary use</li> <li>• Free, Prior, and Informed Consent (FPIC)</li> </ul>
PS8 - Cultural Heritage	<ul style="list-style-type: none"> <li>• Requires Clients to allow access to cultural sites</li> </ul>

# IFC PS 5 : Land Acquisition and Involuntary Resettlement

## Objective of PS 5

- To avoid and minimise displacement by exploring alternative project designs.
- To provide compensation for loss of assets at replacement cost
- To improve or restore livelihood



### Performance Standard 5 Land Acquisition and Involuntary Resettlement

January 1, 2012

#### Introduction

1. Performance Standard 5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons that use this land. Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood<sup>1</sup>) as a result of project-related land acquisition<sup>2</sup> and/or restrictions on land use. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

2. Unless properly managed, involuntary resettlement may result in long-term hardship and impoverishment for the Affected Communities and persons, as well as environmental damage and adverse socio-economic impacts in areas to which they have been displaced. For these reasons, involuntary resettlement should be avoided. However, where involuntary resettlement is unavoidable, it should be minimized and appropriate measures to mitigate adverse impacts on displaced persons and host communities<sup>3</sup> should be carefully planned and implemented. The government often plays a central role in the land acquisition and resettlement process, including the determination of compensation, and is therefore an important third party in many situations. Experience demonstrates that the direct involvement of the client in resettlement activities can result in more cost-effective, efficient, and timely implementation of those activities, as well as in the introduction of innovative approaches to improving the livelihoods of those affected by resettlement.

# IFC PS 6 : Biodiversity Conservation

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## Objective of PS 6

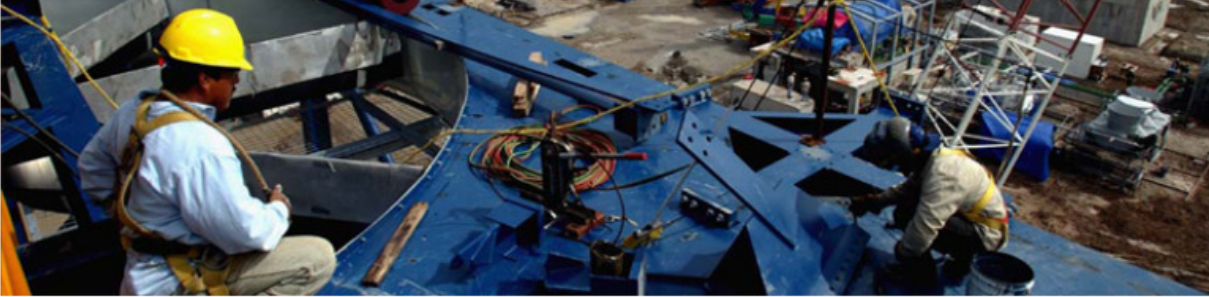
- To protect and conserve biodiversity
- To maintain the benefits from ecosystem services
- To improve the sustainable management of living natural resources through the adoption of practice that integrate conservation needs and development priorities



# IFC EHS Guideline

## IFC EHS Guideline

: A set of general and industry-specific examples of Good International Industry Practice

<ul style="list-style-type: none"><li>IFC Sustainability<ul style="list-style-type: none"><li>+ Risk Management</li><li>- IFC's Sustainability Framework<ul style="list-style-type: none"><li>+ 2012 Edition</li><li>+ 2006 Edition</li><li>- Environmental, Health, and Safety Guidelines<ul style="list-style-type: none"><li>• EHS Guidelines Technical Revision</li><li>• IFC Exclusion List</li><li>• Pre-2006 Safeguards</li></ul></li><li>+ The 2009-2011 Review and Update</li></ul></li><li>+ Sustainable Business Advisory Services<ul style="list-style-type: none"><li>• Multimedia</li><li>• Publications</li></ul></li></ul></li></ul>	<h3>Environmental, Health, and Safety Guidelines</h3>  <p>This page (<a href="http://www.ifc.org/ehsguidelines">www.ifc.org/ehsguidelines</a>) contains the most updated versions of the World Bank Group Environmental, Health, and Safety Guidelines (known as the "EHS Guidelines").</p> <p>The EHS Guidelines were developed as part of a two and a half year review process that ended in 2007. They are intended to be living documents and are occasionally updated.</p> <p>The EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP), as defined in <a href="#">IFC's Performance Standard 3: Resource Efficiency and Pollution Prevention</a>. IFC uses the EHS Guidelines as a technical source of information during project appraisal activities, as described in <a href="#">IFC's Environmental and Social Review Procedures Manual [PDF]</a>.</p> <div data-bbox="1512 938 1807 1209" style="border: 1px solid black; padding: 5px;"><h4>Environmental, Health, and Safety Guidelines Technical Revision</h4><p>IFC is launching a three-year consultative process to revise the World Bank Group Environmental, Health, and Safety (EHS) Guidelines. <a href="#">More »</a></p></div>
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[WWW.IFC.ORG/EHSGUIDELINES](http://WWW.IFC.ORG/EHSGUIDELINES)

# IFC EHS Guideline

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- Cross-cutting environmental, health and safety issues potentially applicable to all sectors

- ✓ Environment (Air emissions and ambient air quality; wastewater and water quality; hazardous materials management; waste; noise)
- ✓ Occupational Health and Safety (Facility design and operation; training; hazards – physical, chemical, biological, radiological; PPE)
- ✓ Community Health and Safety (Water quality and availability; life and fire safety; traffic safety; transportation of hazardous materials; emergency preparedness)
- ✓ Construction and Decommissioning (Environment; OHS, community health and safety)



# IFC EHS Guideline : Industry Sector Guideline

<b>Chemicals</b>	Textiles Manufacturing
Pharmaceuticals and Biotechnology Manufacturing	Tanning and Leather Finishing
Coal Processing	Semiconductors and Electronics Manufacturing
Natural Gas Processing	Printing
Oleochemicals Manufacturing	Foundries
Nitrogenous Fertilizer Manufacturing	Integrated Steel Mills
Phosphate Fertilizer Manufacturing	Base Metal Smelting and Refining
Pesticides Formulation, Manufacturing and Packaging	Metal, Plastic, Rubber Products Manufacturing
Petroleum-based Polymers Manufacturing	
Petroleum Refining	<b>Mining</b>
Large Volume Petroleum-based Organic Chemicals Manufacturing	Mining
Large Volume Inorganic Compounds Manufacturing and Coal Tar Distillation	
	<b>Power</b>
	Wind Energy
<b>Oil and Gas</b>	Geothermal Power Generation
Offshore Oil and Gas Development	Electric Power Transmission and Distribution
Onshore Oil and Gas Development	Thermal Power
Liquefied Natural Gas (LNG) Facilities	

# IFC EHS Guideline : Industry Sector Guideline

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- Applicability
  
- Industry-Specific Impacts and Management
  - ✓ Environment
  - ✓ Occupational Health and Safety
  - ✓ Community Health and Safety
  
- Performance Indicators and Monitoring
  - ✓ Benchmarks – emissions, wastewater etc
  - ✓ OHS Statistics
  
- Cross-referencing of General Guidelines and other Sector Guidelines

# Points of Review for Hydro Power Project

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## ■ Water

- ✓ Is there any relevant water quality standard for reservoir or discharged water?
- ✓ What kind of parameter should be assessed?
- ✓ What kind of impact would be expected due to a change in water quality?

# Points of Review for Hydro Power Project

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## ■ Natural Environment

- ✓ Is there sufficient baseline data of natural environment?
- ✓ Is there any sensitive areas/species in and around the project site? (e.g. Migrant fish, IUCN species, protected area)
- ✓ What kind of impact would be expected from the project?
- ✓ Is any scientific evaluation done in the study?
- ✓ Is reasonable mitigation measure described in the study (e.g. Biodiversity Offset)?

# Points of Review for Hydro Power Project

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## ■ Social

- ✓ Is there sufficient baseline data (Profile/census of impacted people)?
- ✓ What kind of impact would be expected on social from the project?
- ✓ Has Resettlement Action Plan been prepared? Is it adequate?
- ✓ Has necessary consultations been arranged with affected people?
- ✓ Any impact on livelihood of people?
- ✓ Any culturally important area?

# Points of Review for Hydro Power Project

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## ■ EMP and Monitoring

- ✓ What is a major impact which should be adequately managed?
- ✓ What is a monitoring parameter which should be monitored?
- ✓ Who is responsible for an implementation of monitoring and EMP?